

The Highwayman

The Highwayman is Out
For More and Better Roads
in New Jersey

September, 1921
Vol. I
No. 2



After the Overload Truck Bandits

Since the Auto Truck Scales have been built at East Paterson, Newark, Trenton, and Camden, approximately 250 vehicles per week have been weighed by the Motor Vehicle Department. Approximately 75% of the trucks weighed are found to comply with the law and rulings of the Motor Vehicle Department.

The 25% which are found overloaded range from 1,000 lbs. to 19,000 lbs. *overload*. The majority of overloaded trucks are from within the State. More overloads have been detected around the City of Newark than have been found at any of the other scales locations.

The average overload ranges from three to five tons. Many trucks are overloaded five, six and seven tons. In some instances trucks are so overloaded that the springs are pressed down so that the load rests on the axle, the tires being flattened out so that the entire unsprung load is transmitted through the flanges of the wheels to the road.

The above information supplied by Motor Vehicle Commissioner, Wm. L. Dill, makes it apparent that roads could not be built to stand the gross conditions of overload found without bankruptcy to the State. However, Commissioner Dill states that the checking up of trucks is now having a decided effect in preventing overloads.

Many cases have been found where motor-truck owners have mis-stated the capacity of their trucks in order to secure lower license fees. The weighing at irregular intervals at trucks at various points in the State is causing licenses for greater loads to be taken out, thereby increasing the revenue to the State. In addition to the additional revenue from this source, Commissioner Dill estimates that \$10,000 will be taken in fines this year. The matter of increased revenue is, of course, secondary to the saving of our roads through the construction of the scales.

In addition to those mentioned above, Bemington scales will be built at Phillipsburg and Jersey City, capacity sixty tons. These scales were secured from surplus war materials of the United States Government. After considerable difficulty in trying to select a suitable site for the scales in Phillipsburg, which is a very hilly town, the Town Commissioners have solved the problem by permitting us to build on their property on South Main Street. Work was commenced June 21, 1921.



Checking 'Em Up—To Save Your Roads



Allow Me!

Say you, Gentle (?*) Reader!

When I pulled a gun on you last month and held you up, I said I was going to introduce you to the State Highway Department.

Now, if you're a road user (and who isn't that is anybody?) I know you've cursed "the lumpy lanes of N. J." until your breath gave out and your collar button very nearly punctured your Adam's apple.

But it is one thing to cuss, and another to *construct*. What d'you ever *do* to help your little old State have a foot of better road?

That is none of *your* business, you say.

But hold on a minute; it is *your* business—because you're spending money for it. That being so, you ought to have at least a reading acquaintance with the men who are laying out these funds for you. I am introducing you to some of them, and to their work, this month, and you will hear more of them in future issues of the *Highwayman*.

It is surely so, that the more *you* know about roads, the better roads your State will have. Just send your name into the Highway Department at Trenton, N. J., and I'll hunt you up once every month and introduce you to some new member of the Highway Band; and also keep you posted on detours all over the State.

The Highwayman

(*Like H—I!)

The Highwayman

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Published Monthly By The
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The *Highwayman* will be sent free upon application to
any citizen of New Jersey who is interested in
"More and Better Roads For New Jersey"!

THE HIGHWAYMAN

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Keeping the Contractors Keeping Their Contracts

Every time a much-used road is torn up for repairs or re-building, it costs you—the State's road users—thousands of dollars in extra mileage, loss of time, and temper.

And of course every day such a job is prolonged, adds to your losses.

In order to have every road job completed at as early a date as possible, a *daily* report is sent in on each job, showing exactly the progress made.

And once every week, at the regular meeting of the Highway Band, each job is checked up; and any contractor who is not keeping up to schedule is sent a letter or a wire, and the "reason why" investigated.



Jerry Juggles with a New Centre Joint

Edward T. Osborn, better known to the Highway world as "Jerry", has been working with a new type of centre joint down on the Route 6 (Shirley-Bridgeton) job. Jerry now has the joint straightened out to his satisfaction. The last daily report from Jerry on this job showed 1038 lined feet laid in one day. Over a mile was laid in the week—a record for concrete paving in the State.



Give Your Friends a Tip on "Road Tips"

How do you like the *Highwayman's* detour service? Enclosed with this issue, you'll find the second "Road Tips" chart. If you find it a convenience in traveling, why not tell your friends about it? They'll thank you for the tip.

Telegram:

Western Union
Trenton, New Jersey—Editor *The Highwayman*: Gage is gunshy—can't get his photo for *Highwayman*. Excessive modesty has kept him from ever permitting his picture to be used anywhere, any time—sorry cannot help you out.—Edward.

[See last page]

A "word picture" of R. B. Gage—"the watch-dog of the Highway Department."

Concrete Facts vs. Calyx Cores

BY R. B. GAGE
Chemical Engineer

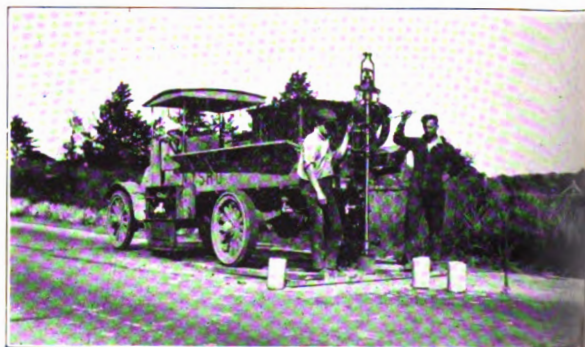
There are two methods of proving whether a paved road has been constructed as required by the specifications, and will be satisfactory.

The first method is based on assumption; the other on actual testing. This testing is made possible by a new machine called the Calyx Core Drill, which is equipped to bore a "core", several inches in diameter, out of the newly constructed road. This makes it possible to determine exactly the quality of the work being done.

The "assumption method" assumes the pavement has been properly constructed, since all materials used there were of an assured quality. Also the reputation of the contractor is at stake. Moreover the contractor is required to guarantee the pavement for a definite length of time. But such a guarantee is of doubtful value so far as improving the quality of the work or protecting the interest of the public is concerned.

During the construction of bituminous pavements, samples of the finished pavement are taken of each day's work. The thickness, density, and composition of the pavement is secured from these samples. Errors in construction can thus be quickly corrected. Unfortunately samples taken from a concrete pavement, before it has developed a certain strength, are of little value for testing purposes. It is very difficult to take them after the concrete has developed the required strength. Consequently it has been necessary to have cubes cast from the concrete used in the pavement at definite intervals, cured in a given manner, and tested when they are of the proper age.

It has been doubtful whether these cubes constituted a satisfactory check or correctly represent the quality of the pavement. Also, defects have appeared in concrete pavements which could not be explained from the cubes taken. If these defects are to be eliminated, the causes that produce



The "Calyx" drill", which takes the guess out of road testing. It will save taxpayers hundreds of thousands of dollars

of New Jersey



John Ferris, of Jersey City

There is one more of your Highway Commissioners

When Governor Edwards picked his new Highway Commissioner, he aimed to get, above everything else, *practical* men to take charge of the State's expenditure of \$3,000,000 per year for road work.

In the selection of John Ferris, of Jersey City, he got a man who is not only practical, but of broad and sound public vision as well. Mr. Ferris, who was born in Jersey City, has been a contractor in Jersey City for the past twenty-five years. He has engaged in many important public improvements; and is at present a member of the Jersey City Board of Education.

Mr. Ferris' services have been a valuable asset to the Department.

Since they should be determined as soon as possible. With this object in view, a Calyx Core Drill outfit was purchased by the Department, and has been in operation some time. With the above outfit, a six inch (6 in.) concrete core can be secured from a pavement with little difficulty. This method requires a well equipped laboratory and an efficient staff of testing engineers and chemists, yet, the total cost incurred thereby is nominal compared with the losses caused by pavements failing prematurely.

The data secured so far has shown the wisdom of not permitting the coarse and fine aggregate to be dumped on the sub-grade, for evidently a great deal more of this sub-grade material got mixed with the aggregates during handling than was generally thought possible. This sub-grade material frequently is very deleterious; also, the effects of the concrete by permitting it to be dumped on a sandy, soft sub-base has also been noticed in the samples taken.

Again the irregularity in the contour of the sub-base is shown quite plainly by the cores. The accompanying photograph shows this very distinctly. There is a variation in height of nearly four inches (4 in.). This waste of material does not necessarily effect the cost of a given



Cores 1 to 5 from Sec. 3, Route 13; No. 6 from Sec. 1, Route 13. (Rule is 15 in.) Nothing can be "put over" on the Calyx Core drill!

The Slogan

*"If you won't be beat, you can't be beat,"
That is the slogan true
That Johnny Poe gave a football team,
And we give it again to you.
"If you won't be beat, you can't be beat;"
They may leave you dead in the dawn
On the blood red field that you would not yield,
But your spirit goes marching on.*



The Highwayman's Honor Roll

Under this head, from month to month, it is our purpose to mention the men in this department who have done "exceptionally well" at their work, and as a result have been considered worthy of commendation.

Mr. M. A. Cutley, Supervisor of the Northern Division, reports the following as Honor Roll men for the condition of their equipment.

Foremen

John P. Lawless
Thomas Arrastibia
Charles Marino
Fred Yannut
Frank Coe

Chauffeurs

William Crangle
Andrew Tuohy
Henry Conkelton

Rollermen

John Johnston
Donald DeGraw
Herbert Whitesell

Also Mr. Abraham Johnstone, Supervisor, reports the following:

Foremen

J. Herbert Fithian
William Johnson, Jr.

Chauffeurs

Douglas Cox

Jone Canard
John Shassler
Harry Foster
James Gibe
Leon Campbell



Famous Sayings of In-Famous Highwaymen

R. B. Gage, Chemist:—"County Engineers do not know what is in their own specifications."

Chas. Fishberg:—"One of our men left the examination room when he saw the paper that he was to write on had a blue line down the center. Said he could not write on that kind of paper and gave up."

J. A. Williams, Div. Eng'r.:—"Heard of one inspector who claimed the specifications had been changed on him, inquired if 'they were going to use trap rock, or crushed stone'."

Also of the man who reported that they had done a nice job on the macadam face, but were throwing dirt on it from piles alongside the road.

G. R. Moore, Asst. Rt. Way Eng'r.:—"Do not believe in deep side ditches. One of them came up, struck my car, and bent the front axle."

contract, but will increase the cost of future contracts, however. When the Department is doing the work and purchasing the materials direct, this waste of material is a dead loss and should be prevented.

It is the intention to study the drainage conditions of the sub-base when they are subjected to the most adverse conditions, consequently, the openings made in pavements, where the drainage conditions appeared defective, are only temporarily closed, so that the sub-base conditions can be easily determined at any desired season of the year.

In conclusion we have every reason to believe that very valuable data will be secured with this Calyx Core Drill, that will enable the Department to correct some of the defects in construction that have appeared in pavements constructed in the past.

ALONG THE ROAD



CAUGHT AT LAST!
R. B. Gage—author of the article on page 2. D'ye think you'd like to try pulling his leg if you were a Road Contractor?

Making 'Em Safer

One of the greatest concerns of the Highway department is that of *Making Road Travel More Safe*.

Every possible precaution is taken to reduce the "margin of safety" that is dependent upon the "human element" in road traffic.

One big improvement has been the use of signs which can be seen at a much greater distance than those previously employed, and capable of giving night service.

The new department signs, like the ones shown above, will help every one but the manufacturers of *break-linings*!

"Oh, for a Lodge"

Not a senator, but a *quiet* one—"a lodge in some vast wilderness" as the poet put it.

Haven't you ever felt that way yourself? Wished you were a millionaire, with a camp in the Adirondacks, and all that?

Well, you don't need money to have just as much fun.

An auto-tent, a camp stove, the old buss—and a little spot where the leaves are green and the water gurgles and the world and its ways are a million miles away.

And maybe the old pipe isn't fragrant and soothing, after the bacon and coffee! No wonder the Indians called em *peace pipes*!

Where's your favorite camping spot? Send us a Kodak of it for the next HIGHWAYMAN!



"Where leaves are green and water gurgles."



One of the Department's new portable accident and brake-band savers

A Straight Tip

If you would rise to larger pay
And put your work across
Just be the man you'd like to hire—
If you were now the boss.

—Toronto Telegram.

Concrete Philosophy

CORDUROY IKE

A short-sighted financial policy never produces long stretches of good road.

I have "week-ended" in the famous camping places of the hard-worked rich—and I've had a darn-sight better time under a piece of canvas by an un-known streamlet.

If you insist on SPEED you'll get it—sooner or later, in the neck.

Statistics show more accidents on good straight roads than at bad curves. A word to

the wise is sufficient—once in a great while

If Sherman had ever traveled one before he made his famous remark about war, he would have saved it for detours!

While you're swearing at the detours, give a thought to the new hard surfaced road you'll have to glide over next month.

Road Tips



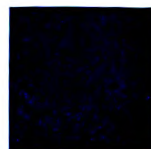
MONTHLY BULLETIN OF DETOURS

Adopted by the New Jersey State Highway Commission
July 6, 1921

All detours posted with signs and blazed with "Arrows"

(Color signals to right will be used along all State roads as soon as possible.)

- ROUTE NO. 3—Ancora-Atco: Camden County**
Via Old White Horse Pike, between Ancora and Atco.
- ROUTE NO. 4—South Amboy: Middlesex County**
In the City of South Amboy, via Stevens Avenue, George Street, Pine Avenue, Bordentown Avenue, Feltus Street, Portia Street.
- ROUTE NO. 4—Keyport: Monmouth County**
Via Cliffwood Road through Matawan to Keyport.
- ROUTE NO. 4—Red Bank-Eatontown: Monmouth County**
Leaving Red Bank via Picknley Road, Oceanport Avenue to Little Silver, Little Silver to Oceanport to end of concrete pavement leading to West Long Branch.
- ROUTE NO. 4—Absecon-Smithville: Atlantic County.**
Via "Jimmy Leeds" road, Absecon to Port Republic.
- ROUTE NO. 5—Budd Lake to Hackettstown: Morris County**
Not necessary to detour. New construction is completed along line of the old road. Present construction being along new right of way.
- ROUTE NO. 5—Ledgewood to Canal Culvert: Morris County**
Via Kenvil, Mount Arlington, Landing, Canal Culvert.
- ROUTE NO. 6—Mullica Hill-Bridgeton: Gloucester, Salem, Cumberland Counties**
Leaving Mullica Hill via Commissioner's Road through Lincoln and Daretown to Shirley then east on Shirley-Elmer road, a distance of about two miles, then south to Husted Station Road then west to the Deerfield Pike, then south on Deerfield Pike to Bridgeton.
- ROUTE NO. 6—Woodstown-Salem: Salem County**
South bound traffic straight through Woodstown via Sharpstown to Welshville. North bound traffic Welshville via Fenwick to Woodstown.
- ROUTE NO. 8—Sussex-Unionville: Sussex County**
Not necessary to detour, as the present road will be kept open and maintained for traffic during construction.
- ROUTE NO. 9—Perryville to West Portal: Hunterdon County**
Via Clinton, Glen Gardner, Hampton, Asbury, West Portal.
- ROUTE NO. 10—Arcadian Way to Fort Lee Ferry: Bergen County**
Not necessary to detour as entire construction is over new right of way, except on River Road, Edgewater, where traffic will be maintained during construction.
- ROUTE NO. 12—Denville-Parsippany-Pine Brook: Morris County**
Denville, Tabor, Morris Plains, Morristown, Whippany, Hanover, Livingston, Essex Fells, Pine Brook.
- ROUTE NO. 12—Phillipsburg to Port Colden: Warren County**
Phillipsburg, Bloomsbury, West Portal, Washington, Port Colden.



This color [blue] on posts or signs indicates that road is running *North* and *South*



Red shows that it lays *East* and *West*



While yellow tells you that it takes a *diagonal* course

New Jersey State Highway Department

For You— "The Highwayman"

Do you use roads? Do you want to know where they are being built, and what detours to take, each month?

Then send, TODAY, to

The Highwayman
New Jersey State Highway Department
Trenton, N. J.

Just ask to be put on The Highwayman's list. A postal will do.



